

B, BamHI; Bg, BglII; E, EcoRI; H, HindIII; Nc, NcoI; P, PstI; S, SalI

FIG. 1

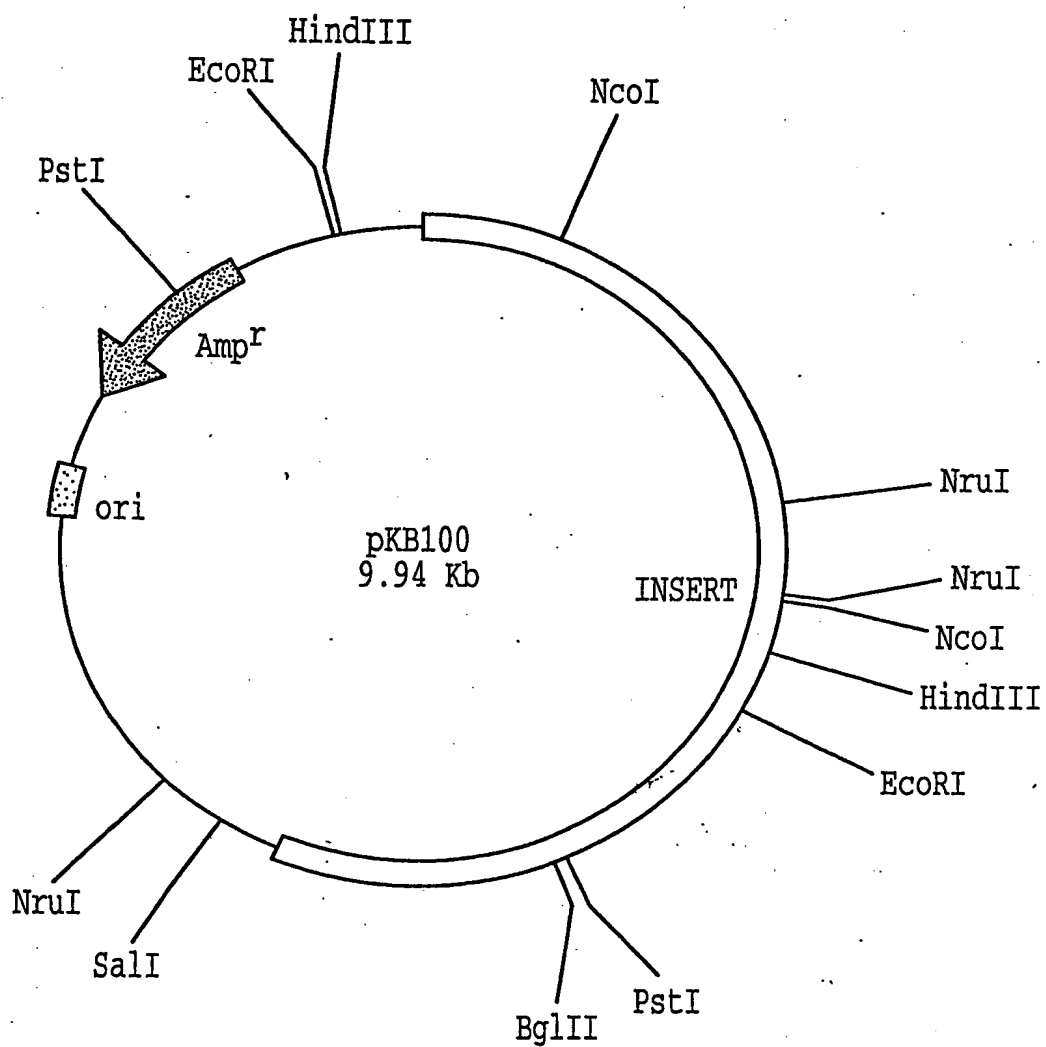


FIG. 2

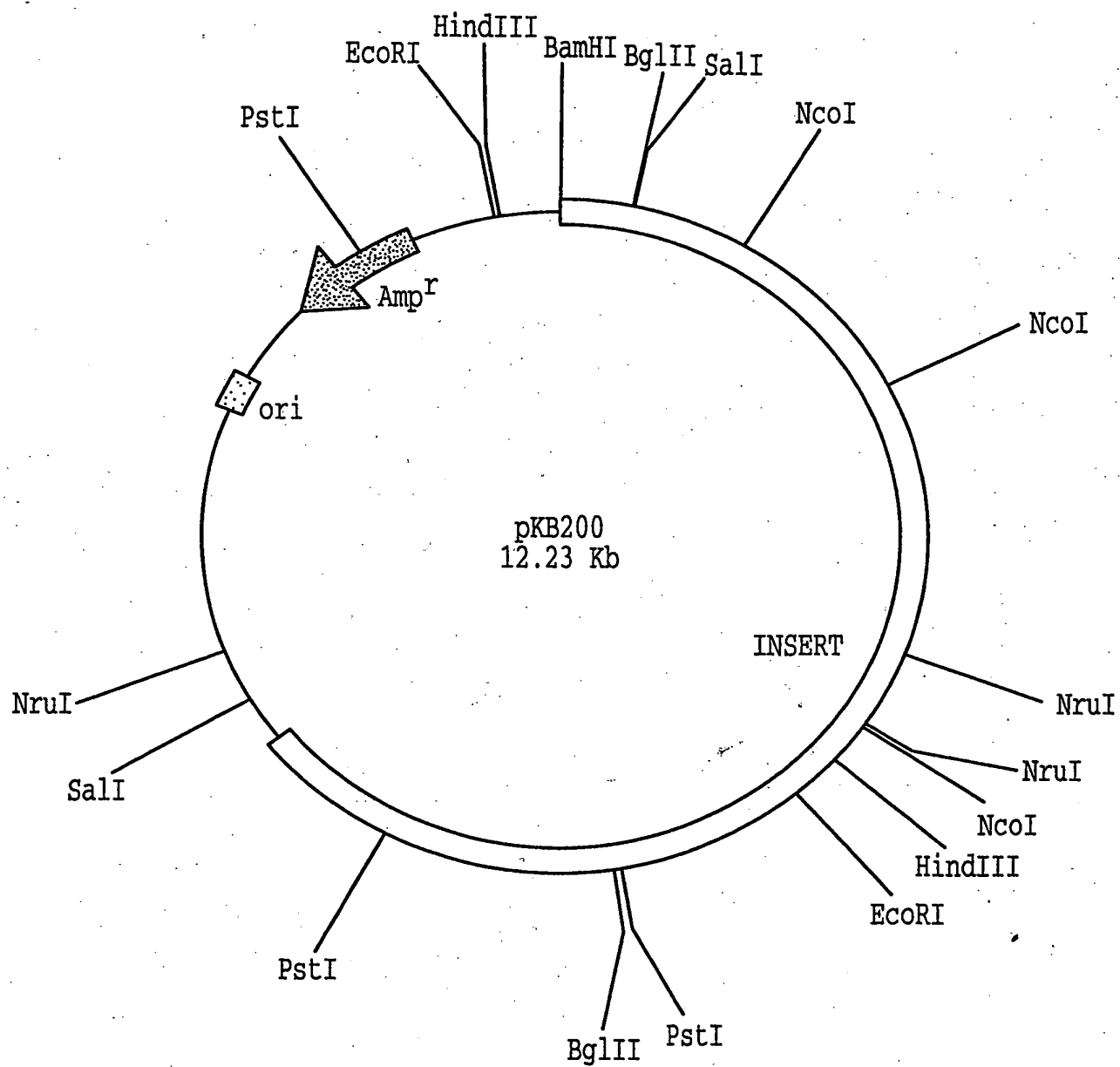
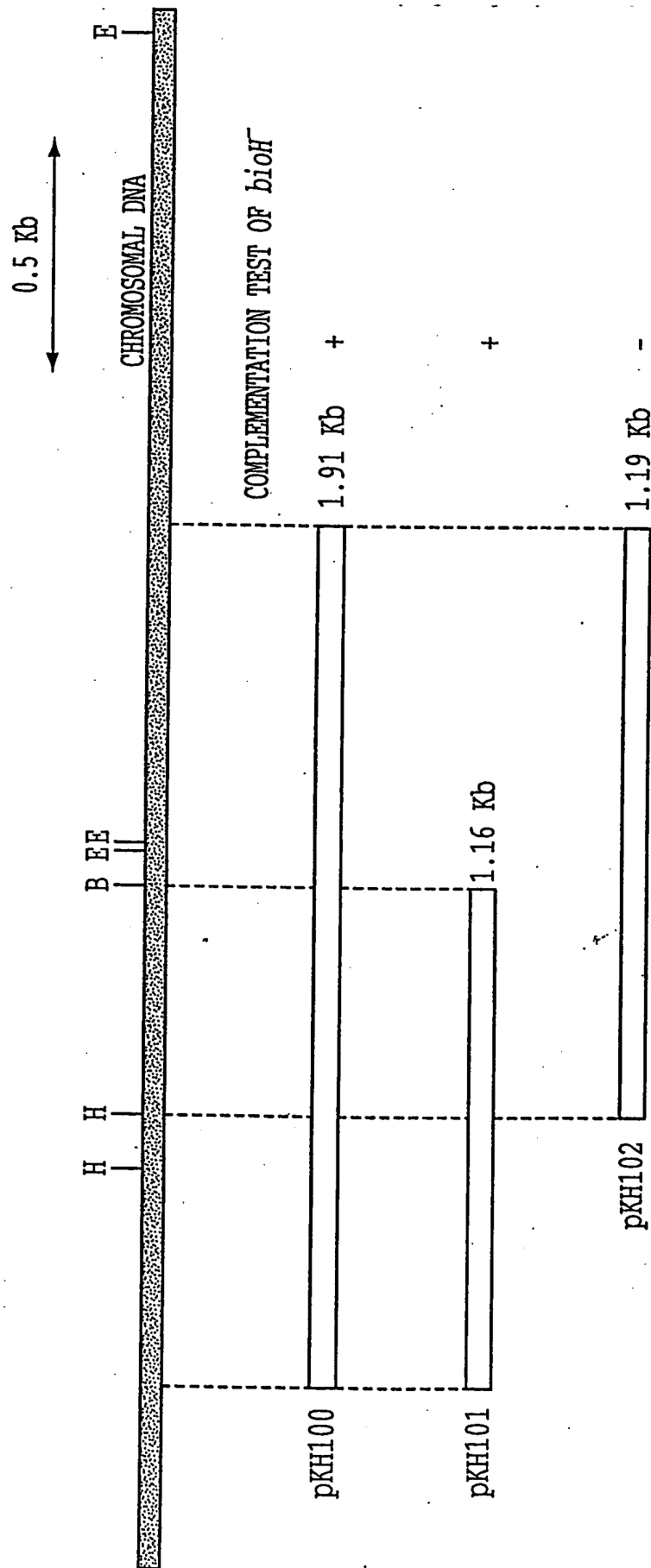
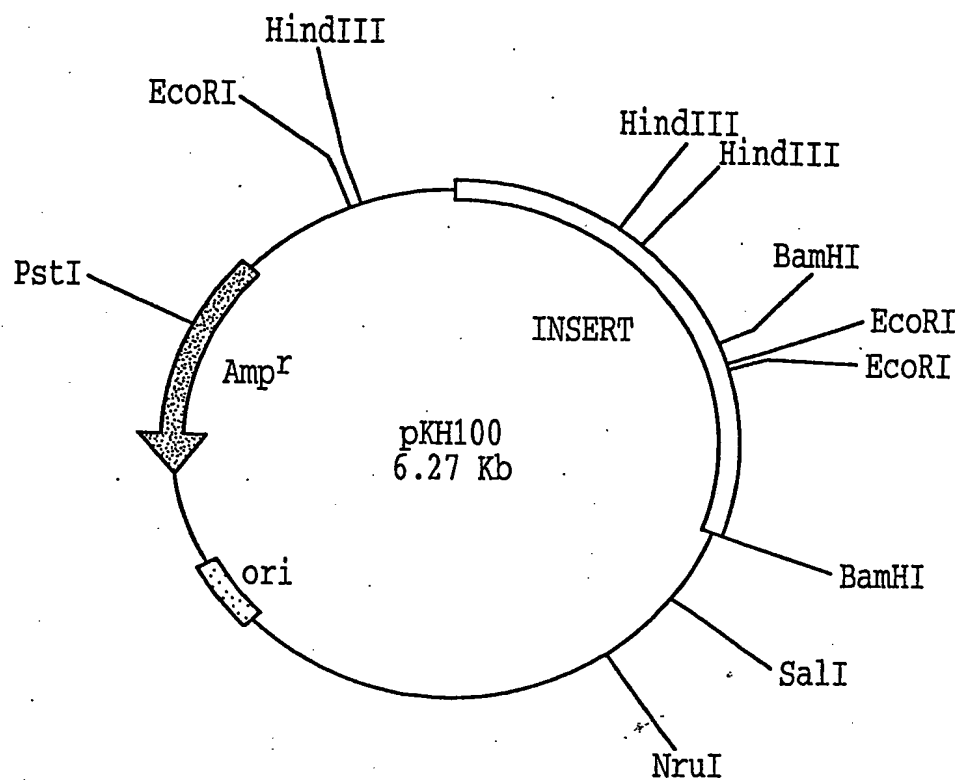


FIG. 3

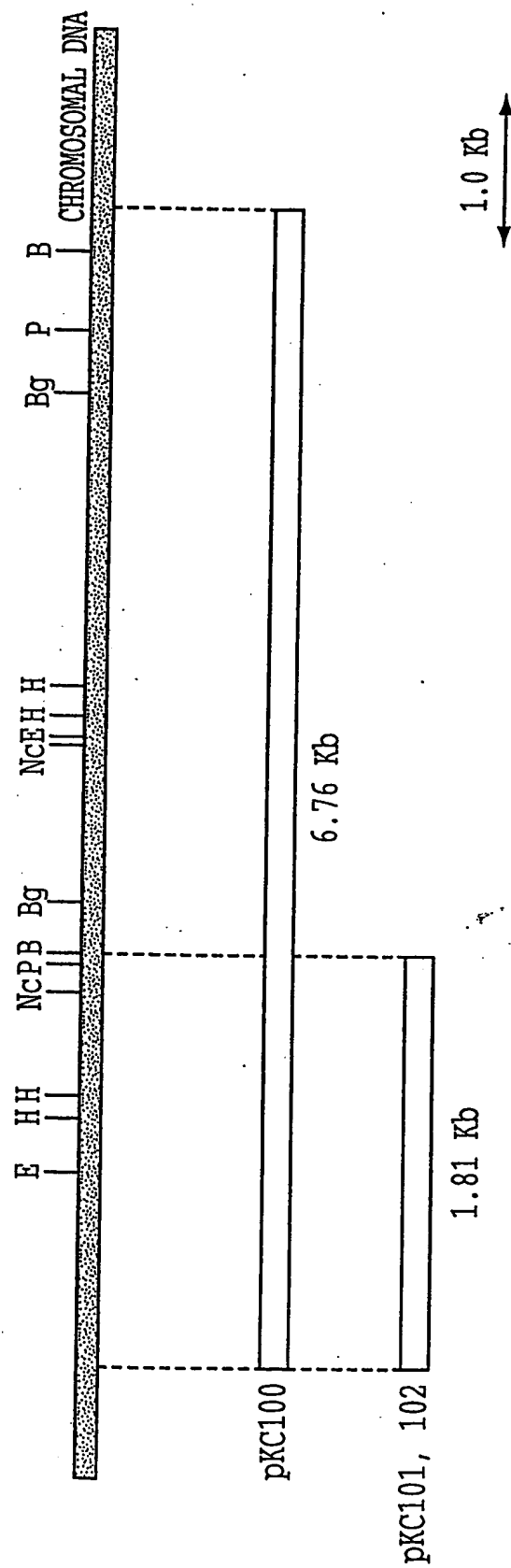


B, BamHI; E, EcoRI; H, HindIII

FIG. 4



**FIG. 5**



B, BamHI; Bg, BglII; E, EcoRI; H, HindIII; Nc, NcoI; P, PstI

FIG. 6

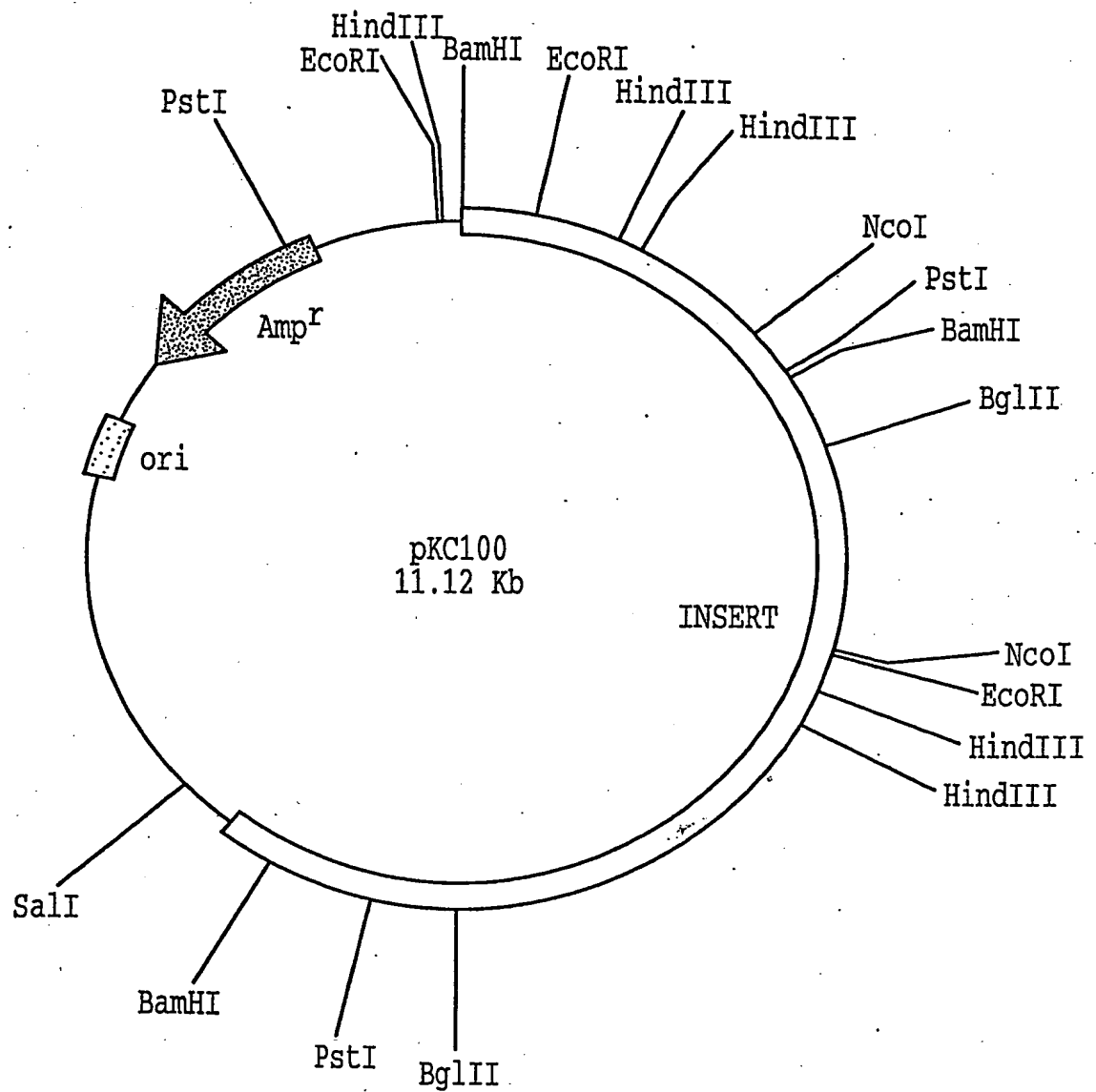
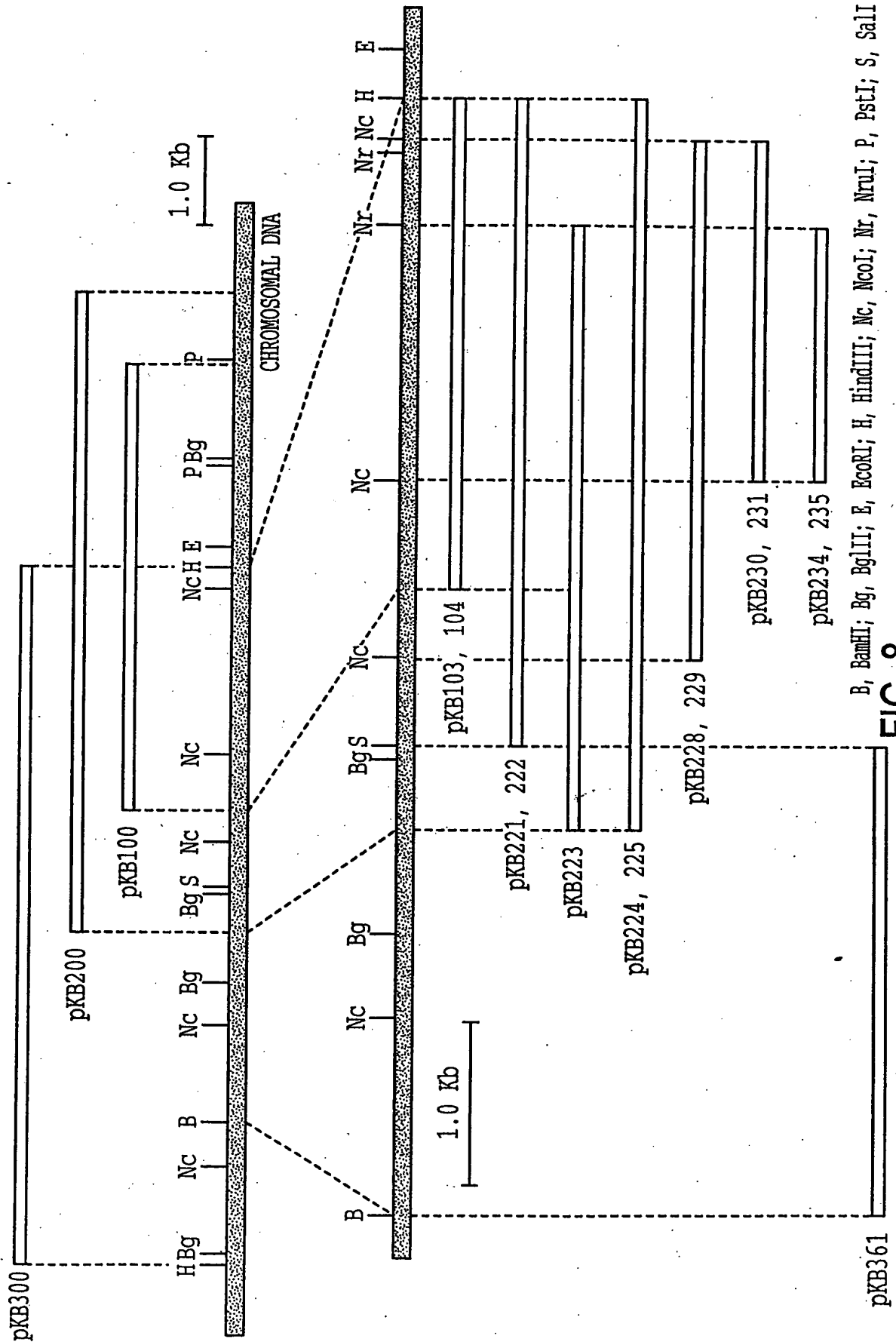


FIG. 7

8  
G  
F



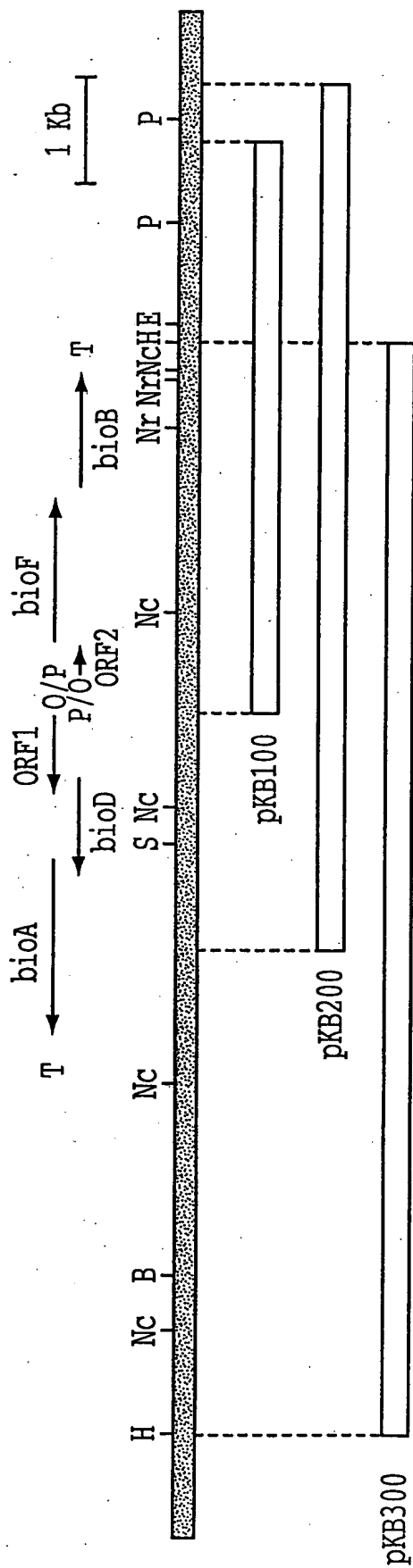


FIG. 9A

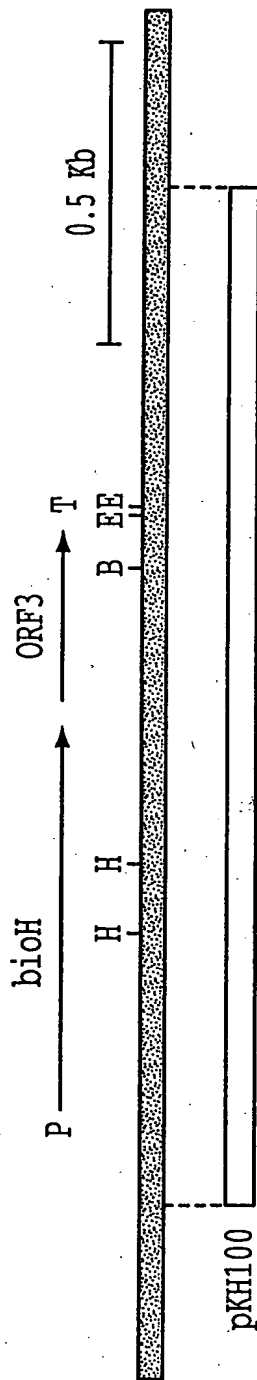


FIG. 9B

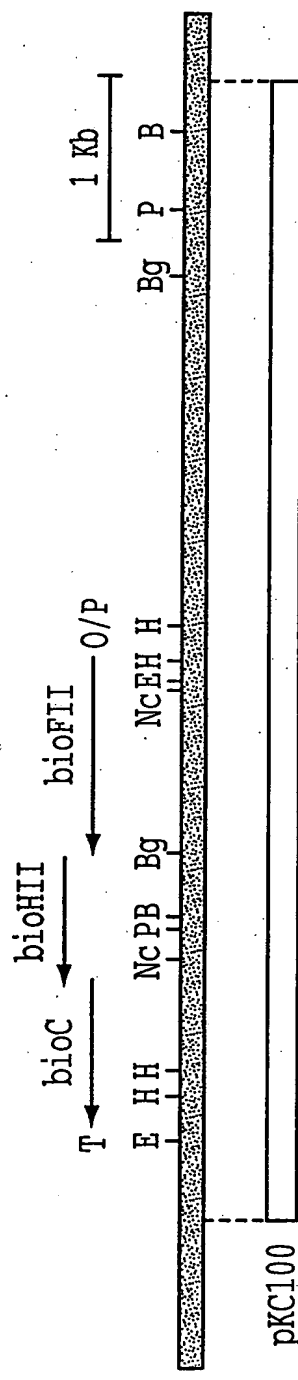


FIG. 9C

5' CGCCAATGGCAGTTAACGCAGTAAATAGGGCAACATAAGAGATCGTTTTAGCTTTCAAGT 60  
GCGGTTACCGTCAATTGCGTCATTTATCCCGTTGTATTCTCTAGCAAAATCGAAA**GTTCA**  
A G I A T L A T F L A V Y S I T K A K L  
←-----ORF1  
TTTCAACCTCCTTTTTTTTAAATTTGGTAGGTAAAATGCCCACTATTAGTGTGCATGATTT 120  
AAAGTTGGAGGAAAAAAATTTTAACCATCCATTTTACGGGTGATAATCACACGTACTAAA  
RBS  
Box1  
ATATTTTATATGTCAACCATTTATTATTTTAGTTAACATATAAAGCGCAATTAAAATGAC 180  
-----→ ←-----  
TATAAAATATACAGTTGGTAAATAATAAAATCAATTGTATATTTTCGCGTTAATTTTACTG  
-35 -10  
AGACTTAGAAAAATATTGAAAATTAGTAATTTGAACAATATTTTATTTGTGTGTTATTATA 240  
TCTGAATCTTTTTTATAACTTTTAATCATTAACCTTGTATATAAAATAAACACACAATAATAT  
-10  
Box2 RBS  
CAATTTATATGTTAACATTTTAAAGATATAGTTAACATATAAAGGCTTGGAGGGAACAAA 300  
-----→ ←-----  
GTAAATATACAATTGATAAAATTCTATATCAATTGTATATTTCCGAACCTCCCTTGTTT  
-35  
ORF2 -----→  
M T G E M L I Q D E L S R E T A V F V A  
TATGACAGGAGAAATGTTAATACAGGATGAACCTTCCAGAGAAACAGCGGTATTTGTGGC 360  
ATACTGTCCTCTTTACAATTATGTCCTACTTGAAAGGTCTCTTTGTGCGCCATAAACACCG 5'

FIG. 10

Applicant(s): Yasuhiro FURUICHI, *et al.*  
Parent Serial No.: 10/033,078  
For: BIOTIN BIOSYNTHETIC GENES

ACTAACCCCTATGGTGTCCAGATTAAGCGTAATGTAGTATAGGATTTTAGTCAATTAGCA 60

-35 -10  
ATTTTTGAAATATTTAGTACGATCACATAATAGAATCATATATAATGATTAAAATATTAA 120

RBS  
TTACAGAAAAGAGGTATTTTCATGCCATTCGTAAATCATGACAATGAAAGCCTTTACTAT 180  
M P F V N H D N E S L Y Y  
bioH ----->

GAGGTTCACGGACAAGGTGATCCTTTATTGTTGATTATGGGGCTCGGCTATAACTCTTTA 240  
E V H G Q G D P L L L I M G L G Y N S L

FIG. 11

}

CGCAAAACGTGAACTCGTTTCAACGGAATTCGCCGAGCAGCCATGGCTTATGATCAACG 300  
Q K R E L V S T E F A E Q P W L M I N G

FIG. 12

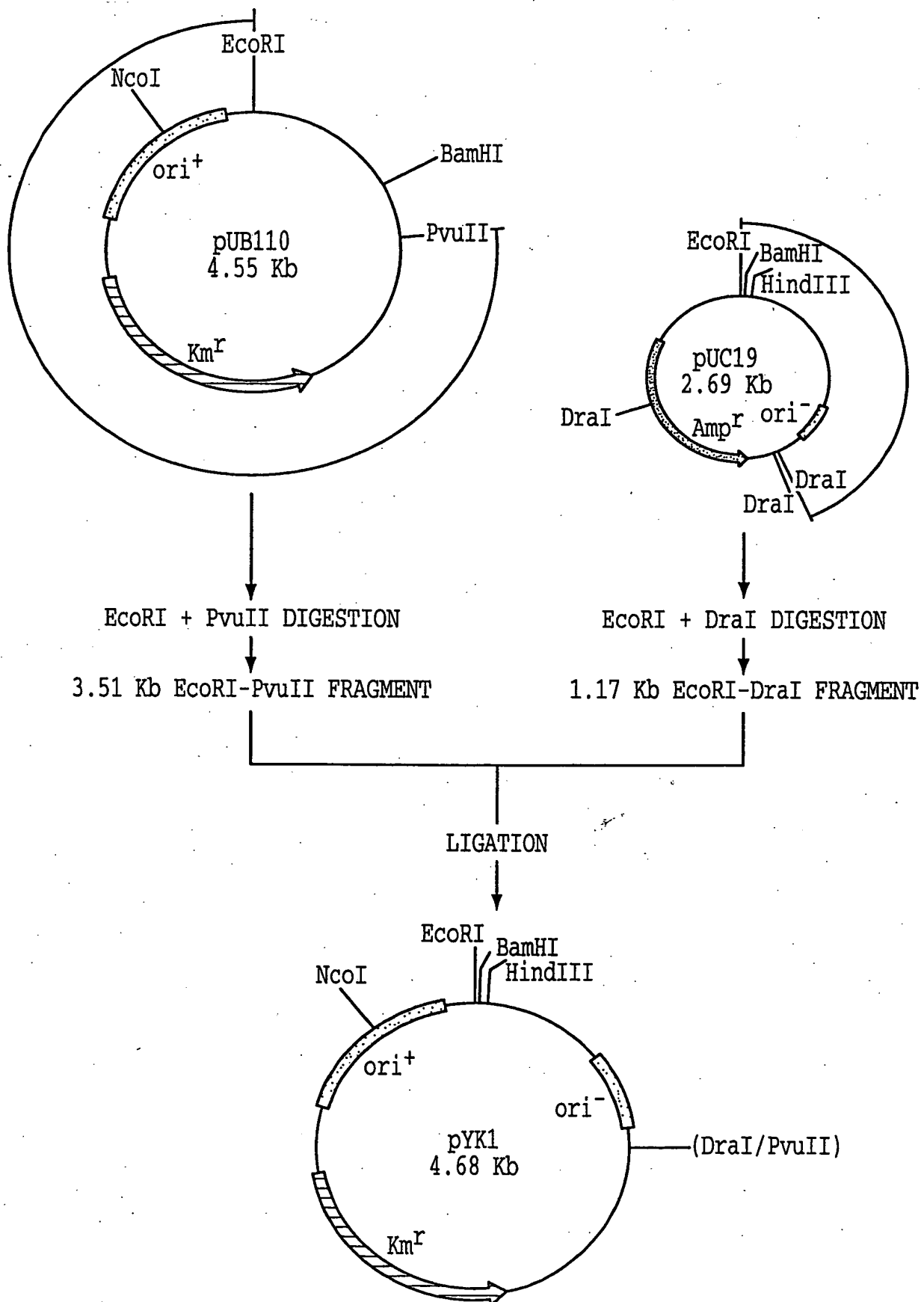


FIG. 13

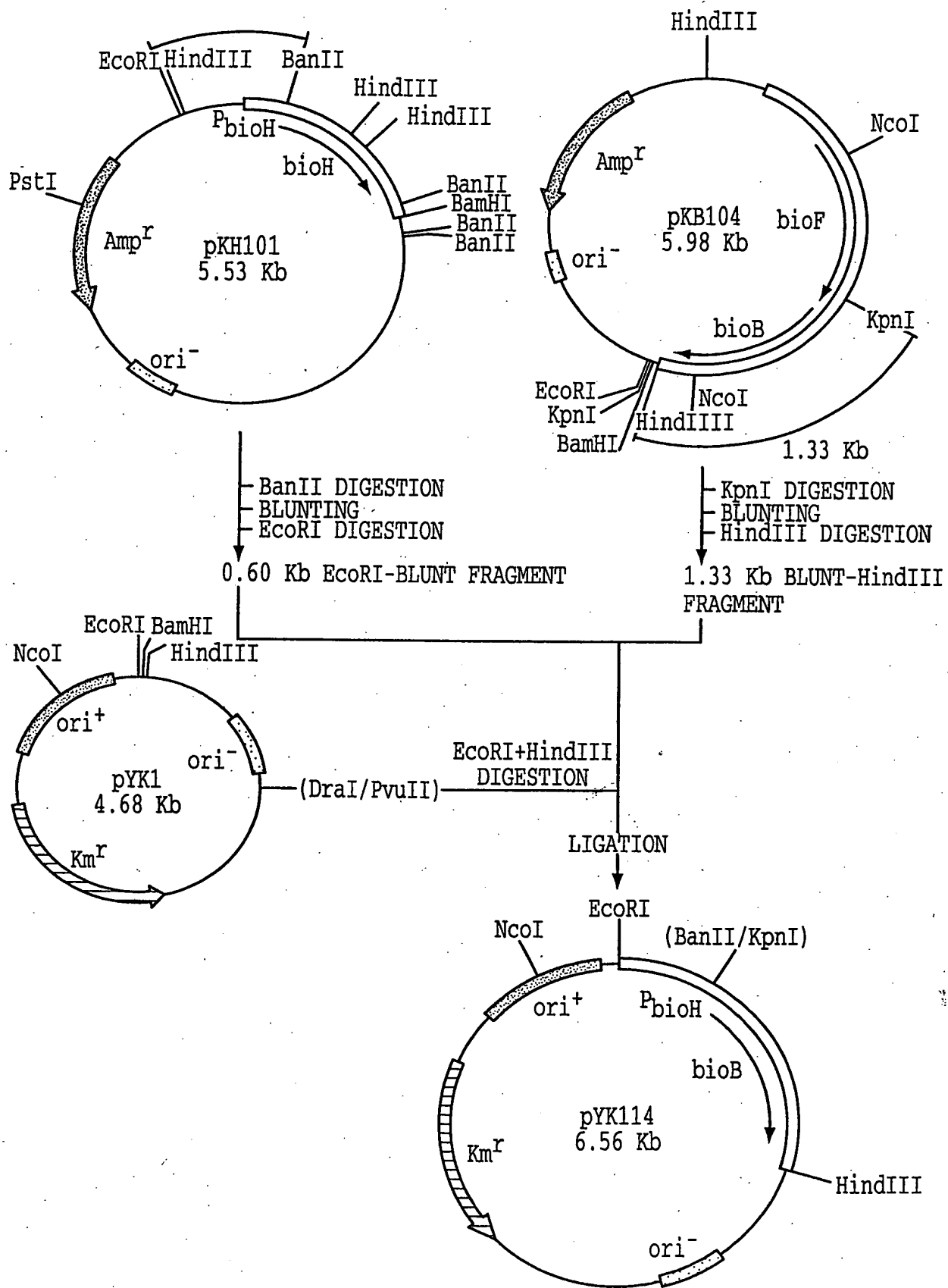


FIG. 14